LAKE: SPEDNIK L (VLMP SCW)
TOWN: VANCEBORO
COUNTY: WASHINGTON

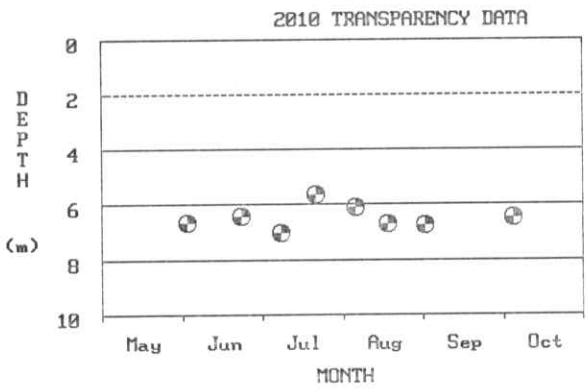
MIDAS: 121
TRUE BASIN: 1
SAMPLE STATION: 2

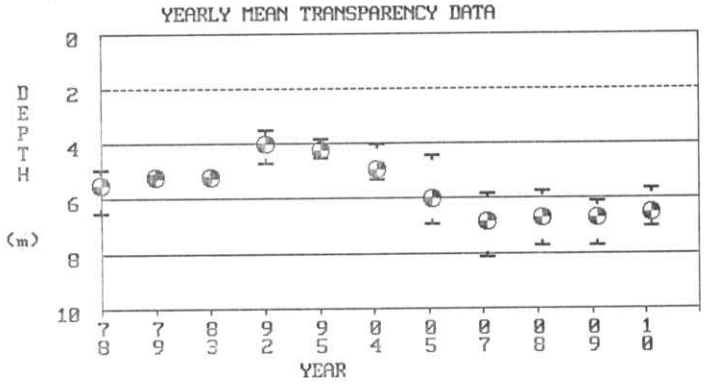
WHOLE LAKE INFORMATION
MAX. DEPTH: 16 m. (54 ft.)
MEAN DEPTH: 6 m. (20 ft.)
DELORME ATLAS #: 46
USGS QUAD: LAMBERT LAKE
IFW REGION F: Penobscot (Enfield)
IFW FISH. MANAGMENT: Warmwater & Coldwater

TRUE BASIN CHARACTERISTICS
SURFACE AREA: Undetermined
FLUSHING RATE: Undetermined
VOLUME: Undetermined
DIRECT DRAINAGE AREA: Undetermined

PLEASE NOTE THE FOLLOWING: The SAMPLE STATION # refers to the location sampled. The term TRUE BASIN is used to define areas within a lake that are separated by shallow reefs or shoals and therefore function as separate lakes. There are approximately 50 lakes in the state that have more than 1 True Basin. True Basin Characteristics are now being included in the first section of these reports to enable users of the Phosphorous Loading Methodology to better evaluate the data. If there is no data for a particular True Basin, True Basin Characteristics must be obtained from the DEP. SPEDNIK L has 1 True Basin.

SECCHI DISK TRANSPARENCY GRAPHS:





Note: 2010 graphs may indicate multiple readings taken on a given day.

SUMMARY OF CHEMICAL AND TROPHIC STATE PARAMETERS:

[* indicates that Secchi disk was visable at bottom of lake (or one reading used in calculation was visable)].

	MEAN COLOR (SPU)	MEAN pH	MEAN ALK (mg/l)	MEAN COND. (uS /cm)	TOTAL PHOS. MEANS (ppb) EPI CORE	SURF GRAB	BOT. GRAB	PRO. GRAB	SECCHI DISK (m.) MIN.	MEAN	MAX.	N	CHLOROPHYLL A(ppb) MIN.	MEAN	MAX.	TROPHIC STATE INDICES EPI PHOS C	G	SEC	CHL
YEAR																			
1978	-	-	-	-	-	-	-	-	4.9	5.5	6.5	3	-	-	-	-	-	-	-
1979	-	-	-	-	-	-	-	-	5.1	5.2	5.2	2	-	-	-	-	-	-	-
1983	-	-	-	-	-	-	-	-	5.2	5.2	5.2	1	-	-	-	-	-	-	-
1992	-	-	-	-	-	-	-	-	3.5	4.0	4.7	3	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-	-	3.8	4.2	4.5	2	-	-	-	-	-	-	-
2004	-	-	-	-	-	-	-	-	4.0	4.9*	5.3*	3	-	-	-	-	-	-	-
2005	-	-	-	-	-	-	-	-	4.4	6.0	6.9	4	-	-	-	-	-	-	-
2007	-	-	-	-	-	-	-	-	5.8	6.8	8.1	5	-	-	-	-	-	33	-
2008	-	-	-	-	-	-	-	-	5.7	6.7	7.7	4	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-	-	6.1	6.7	7.7	3	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-	-	5.6	6.5	7.0	4	-	-	-	-	-	-	-
SUMMARY:	-	-	-	-	-	-	-	-	3.5	5.6*	8.1	11	-	-	-	-	-	33	-

LAKE: SPEDNIK L (VLMP SCW)
TOWN: VANCEBORO
COUNTY: WASHINGTON

MIDAS: 121
*TRUE BASIN: 1
*SAMPLE STATION: 2

LATE SUMMER TEMPERATURE / DISSOLVED OXYGEN PROFILES:

	SAMPLE DATE	
DEPTH	08/21/79	
m	°C	ppm
0.0	18.0	99.9
1.0	18.5	99.9

WATER QUALITY SUMMARY

SPEDNIK LAKE, VANCEBORO
Midas: 121, Sample Station # 2

The Maine Department of Environmental Protection (ME-DEP) and the Volunteer Lake Monitoring Program (VLMP) have collaborated in the collection of lake data to evaluate water quality, track algal blooms, and determine water quality trends. This dataset does not include data for bacteria, mercury, or nutrients other than phosphorus.

Water quality monitoring data have been collected from Spednik Lake since 1978. Only Secchi Disk Transparencies (SDT) have been taken at this station. The water quality of Spednik Lake is considered to be average, based on SDT. The potential for nuisance algae blooms on Spednik Lake is low.

Water Quality Measures: The color of this station in Spednik Lake is a not known. This sample station has an average SDT of 4.9m (16.1ft), which is average for lakes in Maine. No dissolved oxygen (DO) profiles have been taken at this site. The potential for TP to leave the bottom sediments and become available to algae in the water column (internal loading) is unknown at this sample station.

See ME-DEP Explanation of Lake Water Quality Monitoring Report for measured variable explanations. Additional lake information can be found on the Internet at http://www.lakesofmaine.org/ and/or http://www.maine.gov/dep/blwq/lake.htm, or telephone the ME-DEP at 207-287-3901 or the VLMP at 207-783-7733.

Filename: sped121_2, Revised: 3/05, By: jp

LAKE: SPEDNIK L (VLMP SCW)
TOWN: VANCEBORO
COUNTY: WASHINGTON

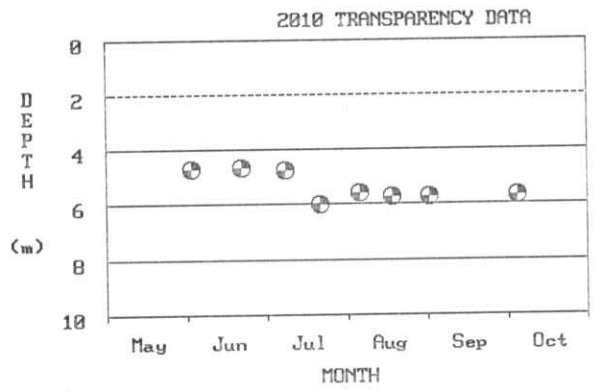
MIDAS: 121
TRUE BASIN: 1
SAMPLE STATION: 7

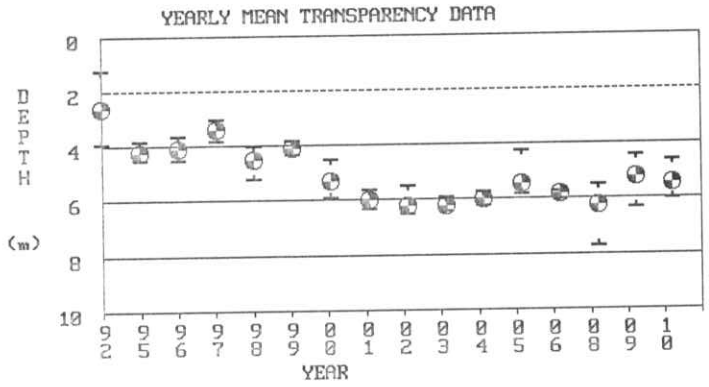
WHOLE LAKE INFORMATION
MAX. DEPTH: 16 m. (54 ft.)
MEAN DEPTH: 6 m. (20 ft.)
DELORME ATLAS #: 46
USGS QUAD: LAMBERT LAKE
IFW REGION F: Penobscot (Enfield)
IFW FISH. MANAGMENT: Warmwater & Coldwater

TRUE BASIN CHARACTERISTICS
SURFACE AREA: Undetermined
FLUSHING RATE: Undetermined
VOLUME: Undetermined
DIRECT DRAINAGE AREA: Undetermined

PLEASE NOTE THE FOLLOWING: The SAMPLE STATION # refers to the location sampled. The term TRUE BASIN is used to define areas within a lake that are separated by shallow reefs or shoals and therefore function as separate lakes. There are approximately 50 lakes in the state that have more than 1 True Basin. True Basin Characteristics are now being included in the first section of these reports to enable users of the Phosphorous Loading Methodology to better evaluate the data. If there is no data for a particular True Basin, True Basin Characteristics must be obtained from the DEP. SPEDNIK L has 1 True Basin.

SECCHI DISK TRANSPARENCY GRAPHS:





Note: 2010 graphs may indicate multiple readings taken on a given day.

SUMMARY OF CHEMICAL AND TROPHIC STATE PARAMETERS:

[* indicates that Secchi disk was visable at bottom of lake (or one reading used in calculation was visable)].

	MEAN COLOR (SPU)	MEAN pH	MEAN ALK (mg/l)	MEAN COND. (uS /cm)	TOTAL PHOS. MEANS (ppb) EPI CORE	SURF GRAB	BOT. GRAB	PRO. GRAB	SECCHI DISK (m.) MIN.	MEAN	MAX.	N	CHLOROPHYLL A(ppb) MIN.	MEAN	MAX.	TROPHIC STATE INDICES EPI PHOS C	G	SEC	CHL
YEAR																			
1992	-	-	-	-	-	-	-	-	1.2	2.6	3.9	4	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-	-	3.8	4.2	4.5	2	-	-	-	-	-	-	-
1996	-	-	-	-	-	-	-	-	3.6	4.1	4.5	6	-	-	-	-	-	59	-
1997	-	-	-	-	-	-	-	-	3.0	3.4	3.8	3	-	-	-	-	-	-	-
1998	-	-	-	-	-	-	-	-	4.0	4.5	5.2	5	-	-	-	-	-	54	-
1999	-	-	-	-	-	-	-	-	3.8	4.1	4.3	6	-	-	-	-	-	59	-
2000	-	-	-	-	-	-	-	-	4.5	5.3	5.9	6	-	-	-	-	-	45	-
2001	-	-	-	-	-	-	-	-	5.6	6.0	6.3	5	-	-	-	-	-	39	-
2002	-	-	-	-	-	-	-	-	5.5	6.2	6.5	6	-	-	-	-	-	37	-
2003	-	-	-	-	-	-	-	-	5.9	6.2	6.4	6	-	-	-	-	-	37	-
2004	-	-	-	-	-	-	-	-	5.7	6.0	6.2	6	-	-	-	-	-	39	-
2005	30	7.07	6.0	24	-	-	6	6	4.2	5.4	5.8	6	1.6	3.4	5.1	-	-	44	-
2006	-	-	-	-	-	-	-	-	5.7	5.8	6.0	4	-	-	-	-	-	-	-
2008	-	-	-	-	-	-	-	-	5.5	6.2	7.7	4	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-	-	4.4	5.2	6.3	3	-	-	-	-	-	-	-

LAKE: SPEDNIK L (VLMP SCW)
TOWN: VANCEBORO
COUNTY: WASHINGTON

MIDAS: 121
*TRUE BASIN: 1
*SAMPLE STATION: 7

SUMMARY OF CHEMICAL AND TROPHIC STATE PARAMETERS:

	MEAN COLOR (SPU)	MEAN pH	MEAN ALK (mg/l)	MEAN COND. (uS /cm)	TOTAL PHOS. MEANS (ppb) EPI CORE	SURF GRAB	BOT. GRAB	PRO. GRAB	SECCHI DISK (m.) MIN.	MEAN	MAX.	N	CHLOROPHYLL A(ppb) MIN.	MEAN	MAX.	TROPHIC STATE INDICES EPI PHOS C	G	SEC	CHL
YEAR																			
2010	-	-	-	-	-	-	-	-	4.6	5.4	6.0	4	-	-	-	-	-	-	-
SUMMARY:	30	7.07	6.0	24	-	-	6	6	1.2	5.0	7.7	16	1.6	3.4	5.1	-	-	46	-

LATE SUMMER TEMPERATURE / DISSOLVED OXYGEN PROFILES:

	SAMPLE DATE	
DEPTH	08/22/05	
m	°C	ppm
1.0	22.9	7.5
2.0	21.5	7.6
3.0	21.2	7.3
4.0	21.1	7.2
5.0	21.0	7.1
6.0	20.9	7.0
7.0	20.2	5.6
8.0	17.8	2.6
9.0	16.0	1.3
10.0	15.7	1.2
11.0	15.5	1.2
12.0	14.9	1.1
13.0	14.9	1.1
14.0	14.8	1.1

WATER QUALITY SUMMARY

SPEDNIK LAKE, VANCEBORO
MIDAS: 0121, Sample Station # 7, Palfrey Lake, New Brunswick

The Maine Department of Environmental Protection (ME-DEP) and the Volunteer Lake Monitoring Program (VLMP) have collaborated in the collection of lake data to evaluate water quality, track algal blooms, and determine water quality trends. This dataset does not include bacteria, mercury, or nutrients other than phosphorus.

Water quality monitoring data for Spednik Lake, Station #7, has been collected since 1992. Only one year of basic chemical data was taken in addition to the Secchi Disk Transparency readings. In summary, the water quality of Spednik Lake is considered average based on measures of SDT, TP and Chla. The potential for nuisance algal blooms on Spednik Lake is low.

Water Quality Measures: Spednik Lake has an average SDT of 5.0 m (16.0 ft). The TP profile grab average was 6 parts per billion (ppb) and the Chla ranged from 1.6 - 5.1 ppb in 2005 with an average of 3.4 ppb. In 2005, one dissolved oxygen (DO) profile was taken and indicated moderate DO depletion in deep areas of the lake. The potential for phosphorus to leave the bottom sediments and become available to algae in the water column (internal loading) is low to moderate. Oxygen levels below 5 parts per million may stress certain cold-water fish and a persistent loss of oxygen may eliminate or reduce habitat for sensitive cold-water species.

Sample Station # 7 is in New Brunswick. Maine Department of Inland Fisheries and Wildlife manages the main body of this lake for both warm-water and cold-water fish.

See ME-DEP Explanation of Lake Water Quality Monitoring Report for measured variable explanations. Additional lake information can be found on the Internet at http://www.lakesofmaine.org/ and/or http://www.maine.gov/dep/blwq/lake.htm, or telephone the ME-DEP at 207-287-3901 or the VLMP at 207-783-7733.

Filename: spe01217, Revised: 1/02, 2/11, By: jp